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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,124	07/30/2003	David R. Haub	CS22492US	6704
20280	7590	05/31/2005	EXAMINER	
MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343			TRAN, PABLO N	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/630,124		HAUB ET AL.	
	Examiner		Art Unit	
	Pablo N Tran		2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/30/03</u> ✓ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-9 and 19-23) in the reply filed on 12/30/04 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9 and 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Loke (WO00/18023).

As per claims 1 and 19, Loke discloses a communication device with reduced current drain, the communication device having a transmitter, a receiver, a control circuit operable to detect interference and control the receiver linearity, wherein if interference is detected the control circuit, determines a frequency offset of the interference, measures a power level of the interference, calculates a receiver linearity required to achieve a desired signal-to-interference ratio, and adjusts the receiver

linearity to achieve the desired signal-to-interference ratio (abstract, fig. 2, pg. 5/ln. 20-pg. 8/ln. 3).

As per claim 2, Loke discloses code division multiple access (CDMA) system (pg. 2/ln. 20).

As per claim 3-4 and 20, Loke discloses estimating a signal spectrum and whether interference products exceed a noise spectrum threshold within a receiver pass-band (fig. 2, pg. 5/ln. 20-pg. 8/ln. 3).

As per claim 5, Loke discloses an attenuation factor of the receiver at the frequency offset (fig. 2, pg. 5/ln. 20-pg. 8/ln. 3).

As per claims 6 and 21, Loke discloses adjusting an analog-to-digital converter dynamic range to a level corresponding to the adjusted receiver linearity (fig. 2, pg. 5/ln. 20-pg. 8/ln. 3).

As per claim 7, Loke discloses measuring a transmit power level and frequency offset of the communication device, and wherein the desired signal-to-interference ratio of the calculating step is dependent upon the transmit power level and frequency offset (fig. 2, pg. 5/ln. 20-pg. 8/ln. 3).

As per claims 8-9 and 22, Loke discloses setting at least one of the group of current and gain to the receiver at a minimum level sufficient to achieve the desired linearity and dynamic range for the desired signal-to-interference ratio (fig. 2, pg. 5/ln. 20-pg. 8/ln. 3).

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loke (WO00/18023) in view of Freed (WO99/45653).

As per claim 23, Loke does not suggest a third-order intercept point threshold to provide sufficient signal-to-interference. However, such method is well known in the art, as suggested by Freed (pg. 9/ln. 27-pg. 10/ln. 29). Therefore, it would have been obvious to one of ordinary skill in the art to provide such method to the receiver of Loke to help improve the dynamic range of the receiver.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brueske et al. (6,670,901) and Hughes (6,668,164) disclose radiotelephone communication system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898.

The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the

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examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

**PABLO N. TRAN
PRIMARY EXAMINER**



4/26/05

May 23, 2005